

P a t e n t C l a i m s :

1. A method of entering text into an electronic communications device (1) by
5 means of a keypad (3) having a number of keys, each key representing a plurality of letters and/or phonetic symbols, and wherein entered text is displayed on a display (2) arranged on the electronic communications device, the method comprising the steps of:

- activating a sequence of keys;
- generating possible phonetic syllables corresponding to said activated key sequence;
- comparing said possible syllables with a vocabulary (6) stored in a memory (5), said vocabulary comprising syllables and corresponding characters occurring in a given language;
- pre-selecting those of said stored syllables and corresponding characters that match said possible syllables; and
- presenting a number of the pre-selected characters on said display, characterized in that a number of said pre-selected phonetic syllables are presented on the display (2) in a separate first graphical object (11; 12; 13) arranged predominantly on the display, and in that characters corresponding to at least one of the syllables presented in the first graphical object are simultaneously presented in a second graphical object (21).

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25 2. A method according to claim 1, characterized in that the method further comprises the step of indicating distinctly one of the syllables presented in said separate first graphical object (11; 12; 13) and in that the characters presented in the second graphical object (21) correspond to the syllable distinctly indicated.

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3. A method according to claim 2, characterized in that the method further comprises the steps of:

- rank ordering the pre-selected phonetic syllables according to their frequency of use in said language, and
- indicating distinctly as default the most commonly used phonetic syllable in said separate first graphical object (11; 12; 13).

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4. A method according to claim 2 or 3, characterized in that the method further comprises the step of allowing a user to indicate distinctly a different one of said pre-selected phonetic syllables.

10 5. A method according to any one of claims 2 to 4, characterized in that the method further comprises the steps of:

- allowing a user to select one of the characters corresponding to the indicated phonetic syllable, and
- adding the selected character to the text displayed on the display (2).

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6. A method according to claim 5, characterized in that the method further comprises the step of removing said first separate graphical object (11; 12; 13) from the display (2) when a character has been selected.

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7. A method according to any one of claims 1 to 4, characterized in that the method further comprises the step of removing said separate first graphical object (11; 12; 13) from the display (2) when a predefined period of time has elapsed since the last activation of a key.

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8. A method according to claim 4, characterized in that the method further comprises the step of arranging said number of pre-selected phonetic syllables vertically in said separate first graphical object (11; 12; 13).

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9. A method according to claim 8, characterized in that the step of allowing a user to indicate distinctly a different one of said pre-selected phonetic syllables is performed by allowing the user to navigate be-

tween individual pre-selected phonetic syllables by activating an upwards-key for indicating a phonetic syllable presented just above the phonetic syllable presently indicated, and by activating a downwards-key for indicating a phonetic syllable presented just below the phonetic syllable presently indicated.

5 10. A method according to claim 9, *characterized* in that the method further comprises the step of allowing the user, in the case where not all pre-selected phonetic syllables are presented in said separate first graphical object (11; 12; 13), to exclude one of the presently presented phonetic syllables and instead present a phonetic syllable not presently presented by activation of one of the upwards- and downwards-keys.

15 11. A method according to any one of claims 1 to 10, *characterized* in that the method further comprises the step of allowing the user to navigate between individual characters in said second graphical object by activating a left arrow key and/or a right arrow key.

20 12. A method according to any one of claims 1 to 11, *characterized* in that the method further comprises the step of adjusting the width of said separate first graphical object (11; 12; 13) according to the length of the phonetic syllables being presented.

25 13. A method according to any one of claims 1 to 12, *characterized* in that the method further comprises the step of presenting the phonetic syllables in said separate first graphical object (11; 12; 13) with a font size which is adjusted according to the length of the phonetic syllables being presented.

30 14. A method according to any one of claims 1 to 13, *characterized* in that the method further comprises the step of generating said possible phonetic syllables as pinyin representations.

15. A method according to claim 2, characterized in that the method further comprises the step of showing a cursor in combination with the distinctly indicated phonetic syllable.

5 16. A method according to any one of claims 1 to 15, characterized in that the method further comprises the step of keeping text that is displayed outside said separate first graphical object (11; 12; 13) unchanged as long as said separate first graphical object is shown on the display (2).

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17. A method according to any one of claims 1 to 15, characterized in that the method further comprises the step of updating text that is displayed outside said separate first graphical object (11; 12; 13) at a low rate compared to the key activation rate as long as said separate

15 first graphical object is shown on the display (2).

18. An electronic communications device (1) having the possibility of entering text into the device, and comprising:

- a keypad (3) having a number of keys, each key representing a plurality of letters and/or phonetic symbols;
- a display (2) arranged on the electronic communications device, on which entered text may be displayed;
- a memory (5), wherein a vocabulary (6) comprising phonetic syllables and corresponding characters occurring in a given language is stored;
- means (7) for generating possible phonetic syllables corresponding to a sequence of activated keys;
- means (8) for comparing said possible phonetic syllables with said stored vocabulary (6) and pre-selecting stored phonetic syllables and corresponding characters that match said possible syllables; and
- means (9) for presenting a number of the pre-selected characters on said display,

characterized in that said presenting means (9) is arranged to present a number of said pre-selected phonetic syllables on the

display (2) in a separate first graphical object (11; 12; 13) arranged predominantly on the display (2), and to present characters corresponding to at least one of the syllables presented in the first graphical object simultaneously in a second graphical object (21).

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19. An electronic communications device according to claim 17, characterized in that said presenting means (9) is further arranged to indicate distinctly one of the syllables presented in said separate first graphical object (11; 12; 13), said distinctly indicated syllable corresponding to the characters presented in the second graphical object (21).

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20. An electronic communications device according to claim 19, characterized in that the device is further arranged to:

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- rank order the pre-selected phonetic syllables according to their frequency of use in said language, and
- indicate distinctly as default the most commonly used phonetic syllable in said separate first graphical object (11; 12; 13).

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21. An electronic communications device according to claim 19 or 20,

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characterized in that the device is further arranged to allow a user to indicate distinctly a different one of said pre-selected phonetic syllables.

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22. An electronic communications device according to any one of claims 19 to 21, characterized in that the device is further arranged to:

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- allow a user to select one of the characters corresponding to the indicated phonetic syllable, and
- add the selected character to the text displayed on the display (2).

23. An electronic communications device according to claim 22, characterized in that the device is further arranged to

remove said separate first graphical object (11; 12; 13) from the display when a character has been selected.

24. An electronic communications device according to any one of claims 18
5 to 21, characterized in that the device is further arranged to remove said separate first graphical object (11; 12; 13) from the display when a predefined period of time has elapsed since the last activation of a key.

10 25. An electronic communications device according to claim 21, characterized in that the device is further arranged to present said number of pre-selected phonetic syllables vertically in said separate first graphical object (11; 12; 13).

15 26. An electronic communications device according to claim 25, characterized in that the device is further arranged to allow a user to indicate distinctly a different one of said pre-selected phonetic syllables by allowing the user to navigate between individual pre-selected phonetic syllables by activating an upwards-key for indicating a phonetic syllable presented just above the phonetic syllable presently indicated, and by activating a downwards-key for indicating a phonetic syllable presented just below the phonetic syllable presently indicated.

20 27. An electronic communications device according to claim 26, characterized in that the device is further arranged to allow the user, in the case where not all pre-selected phonetic syllables are presented in said separate first graphical object (11; 12; 13), to exclude one of the presently presented phonetic syllables and instead present a phonetic syllable not presently presented by activation of one of the upwards- and downwards-keys.

25 30 28. An electronic communications device according to any one of claims 18 to 27, characterized in that the device is further ar-

ranged to allow the user to navigate between individual characters in said second graphical object by activating a left arrow key and/or a right arrow key.

- 5 29. An electronic communications device according to any one of claims 18 to 28, **c h a r a c t e r i z e d** in that the device is further arranged to adjust the width of said separate first graphical object (11; 12; 13) according to the length of the phonetic syllables being presented.
- 10 30. An electronic communications device according to any one of claims 18 to 29, **c h a r a c t e r i z e d** in that the device is further arranged to present the phonetic syllables in said separate first graphical object (11; 12; 13) with a font size which is adjusted according to the length of the phonetic syllables being presented.
- 15 31. An electronic communications device according to any one of claims 18 to 30, **c h a r a c t e r i z e d** in that said possible phonetic syllables are pinyin representations.
- 20 32. An electronic communications device according to claim 19, **c h a r a c t e r i z e d** in that the device is further arranged to show a cursor in combination with the distinctly indicated phonetic syllable.
- 25 33. An electronic communications device according to any one of claims 18 to 32, **c h a r a c t e r i z e d** in that the device is further arranged to keep text that is displayed outside said separate first graphical object (11; 12; 13) unchanged as long as said separate first graphical object is shown on the display (2).
- 30 34. An electronic communications device according to any one of claims 18 to 32, **c h a r a c t e r i z e d** in that the device is further arranged to update text that is displayed outside said separate first graphical

object (11; 12; 13) at a low rate compared to the key activation rate as long as said separate first graphical object is shown on the display (2).

35. An electronic communications device according to any one of claims 18
5 to 34, characterized in that said generating means (7),
comparing means (8) and presenting means (9) are implemented in a processor (4).